

## Options for Closing the Gap on Forestry Management Measures

2/9/2015

### Background/Context

EPA and NOAA find that gaps in Oregon's coastal nonpoint program remain. Specifically, the State has not adopted additional management measures applicable to forestry that are necessary to achieve and maintain applicable water quality standards and protect designated uses. This paper describes how Oregon may strengthen and expand its forest management measures in ways that will achieve a healthy resilient coastal environment where forest management measures satisfy the Congressional objectives of the Coastal Zone Act Reauthorization Amendments (CZARA).

### General CZARA Guidelines for Approval

There are two pathways for states to achieve an approvable program: 1) a *regulatory program*; and/or 2) a *voluntary approach*. A voluntary approach requires that the State provide the following<sup>1</sup>:

- a description of the voluntary programs, including the methods for tracking and evaluating those programs Oregon will use to encourage implementation of the management measures;
- a legal opinion from the attorney general or an attorney representing the agency with jurisdiction for enforcement that such authorities can be used to prevent nonpoint pollution and require management measure implementation, as necessary; and
- a description of the mechanism or process that links the implementing agency with the enforcement agency and a commitment to use the existing authorities where necessary, notwithstanding the statutory "BMP safe harbor" provision in the Forest Practices Act.

### Options for Oregon to Satisfy its CZARA Requirement to Adopt Additional Management Measures for Forestry

#### • **Riparian Protection**

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<sup>1</sup> See NOAA and EPA's 2001 memo on Enforceable Policies and Mechanisms for State Coastal Nonpoint Source Programs.  
<http://coast.noaa.gov/czm/pollutioncontrol/media/epmmemo.pdf>

- **Small and Medium Fish-Bearing Streams: State currently pursuing regulatory program:**
  - Current Deficiencies/Shortfall: Inadequate riparian protection for small and medium fish-bearing streams. Available data, including Ripstream Study data and analysis, shows that current Oregon Forest Practices Act measures do not ensure that forest operations meet Oregon’s narrative water quality criterion for protecting cold water (PCW) in small and medium fish-bearing streams. Importantly, unlike the PCW criterion, the CZARA program requirements are not limited to waters currently inhabited by threatened or endangered salmonid fishes, so this deficiency in protecting existing cold water applies to all small and medium fish-bearing streams across the coastal nonpoint management area.
  - State Actions Needed: 1) **Complete riparian rulemaking by July 1, 2016;** 2) Rule should be designed to meet the PCW criterion in all small and medium fish bearing streams and upstream waters supporting the PCW criterion; and 3) The rule should also include a means to monitor whether it is succeeding in assuring that forest operations comply with the PCW criterion.
- **Non-Fish-Bearing Streams: State may pursue regulatory and/or voluntary approaches:**
  - Current Deficiencies/Shortfall: The Oregon Forest Practices Rules do not require riparian vegetation protections for small type N streams in the Coast Range. The RipStream Study results, and earlier studies, show that the state’s current Forest Practices Act measures on private forest land, including in the Coast Range (which encompasses most of the coastal nonpoint program management area), do not ensure that the State’s water quality standards are being met.  
  
State Action Needed: **By July 1, 2016,** revise and implement additional management measures for riparian areas adjacent to small non-fish-bearing streams necessary to achieve and maintain water quality standards, including the PCW criterion, and protect designated uses. This could be through regulatory or voluntary means (or a combination of both).  
  
Voluntary—If the state chooses a voluntary approach to meet all or part of the non-fish bearing streams requirement, the state must also meet the following: **By July 1, 2016, Oregon must** demonstrate how it is showing compliance with elements of a voluntary program (see “General CZARA Guidelines for Approval” section above or NOAA and EPA’s 2001 memo on Enforceable Policies and Mechanisms for State Coastal Nonpoint Source Programs, <http://coast.noaa.gov/czm/pollutioncontrol/media/epmmemo.pdf>).
- **Forestry Roads: Regulatory and/or voluntary approaches would need to address the following items:**
  - Current Deficiencies/Shortfall:

- *Regulatory* - Recent rule changes and new policies do not sufficiently address water quality impairments associated with “legacy” roads, (i.e., roads that do not meet current State requirements with respect to siting, construction, maintenance, and road drainage) or impairments associated with the portion of the existing network where construction or reconstruction is not proposed.
- *Voluntary* –ODF’s voluntary program does not adequately address legacy roads, nor has the state satisfied all elements needed for a voluntary program (see above).
- Examples of State Actions Needed:
  - *Regulatory* – **By July 31, 2016**, establish regulations and or policies that address the above deficiencies. Or,
  - *Voluntary* – **By July 1, 2016**, 1) establish a road survey or inventory program that considers active, inactive, vacant and legacy/old roads that have the potential to deliver sediment to streams; 2) develop a ranking system to establish priorities for road repair or decommissioning; 3) develop a timeline for addressing priority road issues; and 4) develop a public reporting and tracking component to assess progress for remediating identified forest road problems.

*For an effective voluntary approach, all are needed as a package. The state must also meet other elements needed for voluntary program (see General CZARA Guidelines for Approval section above or NOAA and EPA’s 2001 memo on Enforceable Policies and Mechanisms for State Coastal Nonpoint Source Programs (<http://coast.noaa.gov/czm/pollutioncontrol/media/epmmemo.pdf>)).*

- **Protection of Landslide-Prone Areas: Regulatory and/or voluntary approach would need to address the following items:**

- Current Deficiencies/Shortfall:
  - *Regulatory* - Oregon’s current rules protect for public safety against shallow, rapidly moving landslides. Oregon does not have additional management measures for forestry in place to protect high-risk landslide areas to ensure water quality standards are met and designated uses are protected. While a natural state of landslide activity is not preventable, and is even desirable to provide large woody debris to enhance habitat complexity and value, there needs to be a balanced program that prevents human-induced landslide activity that adds excessive sediment to streams, or degrades streams through debris flows, impairing water quality and blocking or impairing salmon habitat.

- *Voluntary* – The voluntary measure identified by the State gives landowners credit for leaving standing live trees in landslide prone slopes as an eventual source of large wood for fish-bearing streams. NOAA and EPA do not consider this voluntary action a sufficient management measure to reduce high-risk landslides that adversely affect water quality standards or designated uses. While this is a good management practice, the measure is not designed to protect high-risk erosion areas but rather to ensure large wood is available to provide additional stream complexity when a landslide occurs. In addition, the State hasn't shown if its voluntary measure is effective in controlling the rate of human-induced landslides and debris flows. Nor has it shown how it monitors and tracks the implementation and effectiveness of voluntary measures; demonstrated it has suitable back-up authority to ensure implementation of the voluntary measures; or provided a commitment to use that back-up authority.
- Examples of State Actions Needed:
  - *Regulatory* – **By July 1, 2016**, establish a program that includes a scientifically rigorous process for identifying high-risk areas and unstable slopes based on field review by trained staff and making maps of high-risk landslide areas available to foresters during harvest planning. Adopt similar harvest and road construction restrictions for all high-risk landslide prone areas with the moderate-to-high potential to degrade water quality and designated uses, not just those where landslides pose risks to public safety and property.
  - *Voluntary* – **By July 1, 2016**, the state could pursue several actions that would collectively address this issue such as: 1) Develop a scientifically rigorous process for identifying high-risk areas and unstable slopes based on field review by trained staff. 2) Develop more robust voluntary programs to encourage and incentivize the use of forestry BMPs to protect high-risk landslide areas that have the potential to impact water quality and designated uses, such as no-harvest restrictions around high-risk areas and ensuring that roads are designed, constructed, and maintained in such a manner that the risk of triggering slope failures is minimized. Making maps of high-risk landslide areas widely available could improve water quality by informing foresters during harvest planning. 3) Institute a monitoring program to track compliance with the FPA rules and voluntary guidance for high-risk landslide-prone areas and the effectiveness of the practices in reducing slope failures. Identify ODF and DEQ general authorities for enforcing changes when voluntary measures are not implemented; 4) Integrate processes to identify high-risk landslide prone areas and specific BMPs to protect these areas into the TMDL development process. .

*For all voluntary programs, the State must meet all elements needed for voluntary program (see General CZARA Guidelines for Approval above or NOAA and EPA's 2001 memo on Enforceable Policies and Mechanisms for State Coastal Nonpoint Source Programs (<http://coast.noaa.gov/czm/pollutioncontrol/media/epmmemo.pdf>)).*

- **Spray Buffers for Aerial Application of Herbicides on Non-Fish-Bearing Streams: regulatory and/or voluntary approaches that could be established include the following items:**
  - Current Deficiencies/Shortfall:
    - *Regulatory* - Oregon does not have any “no-spray buffer” requirements to protect non-fish-bearing streams when herbicides are aerially applied.
    - *Voluntary* –Voluntary no-spray buffers do not exist, nor is there monitoring and tracking on non-fish-bearing streams.
  - Examples of State Actions Needed:
    - *Regulatory* – **By July 1, 2016, 1)** adopt rules for aerial herbicide spray buffers for small, non-fish-bearing streams; or 2) adopt riparian buffer protections for timber harvest along non-fish-bearing streams that are also designated no-spray buffers, provided they are sufficiently wide to reduce pesticide loading during aerial spraying; OR
    - *Voluntary* – **By July 1, 2016, 1)** expand existing guidelines to create and maintain voluntary buffers for the aerial application of herbicides on non-fish-bearing streams and educate and train applicators on the new guidance; 2) monitor and track that voluntary guidelines are followed; 3) identify ODF and DEQ general authorities for enforcing changes when voluntary measures are not implemented; 4) revise the ODF Notification of Operation form to include a check box for aerial applicators to indicate that they must adhere to FIFRA labels especially for herbicides that are prohibited from use in/above waterbodies, for all stream types, including non-fish-bearing streams; and 5) track and evaluate the implementation of voluntary measures for the aerial application of herbicides along non-fish bearing streams to assess the effectiveness of these practices.

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**Comment [PC1]:** The purpose of this document was to summarize the options that the State could pursue to address the gaps in forestry management measures. CZARA requires that the gaps be addressed through either a regulatory program or voluntary program. The specific substance options in this summary discussion document are "options" not have to dos. The only have to do is to address the gaps and to do so either through a regulatory or voluntary program.

### **Ex. 5 - Deliberative**

**Comment [AC3]:** This statement comes directly from the opening para. of our decision doc. The lang. related to WQS and designated uses is what CZARA requires of us and cannot be stricken and replaced with "healthy watershed" as the state proposed, since that is inconsistent with statutory requirements of the program.

**Comment [AC4]:** I see this as an important distinction to show that is not just strengthening existing MMs but developing additional ones too, as they were conditioned to do.

**Comment [HA5]:** We need to have a better understanding of this statement. I am not sure what this infers or implies.

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○ **Small and Medium Fish-Bearing Streams: State currently pursuing regulatory program:**

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● **Forestry Roads: Regulatory and/or voluntary approaches would need to address the following items:**

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**Ex. 5 - Deliberative**

**Comment [HA7]:** I am not sure why July 2016 is the timeline for adopting a riparian rule change for medium and small fish bearing streams. The State's anticipated timeline, for adopting riparian rule changes that are currently being considered, is July 2015. We could identify the State's ... [1]

**Ex. 5 - Deliberative**

**Comment [HA9]:** The Oregon Forest Practices Rules do not require riparian vegetation protections for type N streams in the Coast geographic region.

**Ex. 5 - Deliberative**

**Ex. 5 - Deliberative**

**Comment [AC12]:** This statement is now consistent with statements made in our decision doc (see last full para. on pg. 7). State's rewrite (which I changed) was not.

**Comment [AC13]:** Listing these as "examples" of state actions needed was not appropriate as these are MUSTS, not optional, if a state pursues a voluntary approach. ... [5]

**Comment [AC14]:** This is encompassed by "compliance with elements of a voluntary program so not do need to restate).

**Comment [d15]:** How is compliance determined? Is it buffers of a certain distance everywhere all the time or an approach that achieves the outcome of cold water and ... [6]

**Comment [AC16]:** See bullets outlining requirements for voluntary programs under CZARA under "General CZARA Guidances for Approval" on first page.

**Comment [PC17]:** Compliance will depend on what sort of guidelines or requirements the State establishes and what level of flexibility it builds into those guidelines if ... [7]

- *Regulatory* - Recent rule changes and new policies do not sufficiently address water quality impairments associated with “legacy” roads, (i.e., roads that do not meet current State requirements with respect to siting, construction, maintenance, and road drainage) or impairments associated with the portion of the existing network where construction or reconstruction is not proposed.
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**Comment [AC18]:** This phrasing is inconsistent with how this section is structured elsewhere in the document. This summary of current deficiencies needs to reflect statements from our decision doc. Therefore is it implied that NOAA and EPA found .... And it does not need to be stated. I disagree with the state’s word choice of “NOAA and EPA believe”. We shouldn’t let the state put words in our mouth here.

**Comment [d19]:** Or “it cannot be determined if the voluntary program adequately addresses legacy roads”

**Comment [AC20]:** This sentence does not belong in a section titled “Current Deficiencies/Shortfalls”

**Comment [AC21]:** It was my understanding that the agreement we worked out was for OR to submit an approvable program by July 2016 (before we need to issue the next year’s award)

**Comment [HA22]:** Vacant

## Ex. 5 - Deliberative

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**Comment [AC24]:** Now the statement is consistent with our decision doc. Yes, the state hasn't satisfied the requirements for a voluntary program but the bigger issue here is that the state hasn't demonstrated it has any voluntary measures are that acceptable.

**Comment [HA25]:** I support Allison's point. The leave trees in the landslide prone areas are intended to become a source of large wood for downstream fish streams. This measure isn't necessarily intended to prevent landslides that impact water quality.

**Comment [HA26]:** Change "life" to public safety to be consistent with ODF rules

**Comment [AC27]:** The decision doc. Doesn't state that OR has to do all of the voluntary approaches.

**Comment [WRM\*G28]:** Not really voluntary, and will slow down overall progress significantly.

**Comment [AC29]:** I know state recommended striking this (see WRM\*G31 comment above) but this is an option and I think still within the realm of possibility. The state can come can say they don't want to do this option, which is fine but we should still include it as an alternative in our first transmittal to the state as it aligns with our decision doc.

*For all voluntary programs, the State must meet all elements needed for voluntary program (see General CZARA Guidelines for Approval above or NOAA and EPA's 2001 memo on Enforceable Policies and Mechanisms for State Coastal Nonpoint Source Programs (<http://coast.noaa.gov/czm/pollutioncontrol/media/epmmemo.pdf>)).*

○ **Spray Buffers for Aerial Application of Herbicides on Non-Fish-Bearing Streams: regulatory and/or voluntary approaches that could be established include the following items:**

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- *Voluntary* - Voluntary no-spray buffers do not exist, nor is there monitoring and tracking on non-fish-bearing streams.

**Comment [WS30]:** Verify the implication that fish bearing streams are adequately protected.

○ Examples of State Actions Needed:

- *Regulatory* – **By July 1, 2016, 1)** adopt rules for aerial herbicide spray buffers for small, non-fish-bearing streams; or 2) adopt riparian buffer protections for timber harvest along non-fish-bearing streams that are also designated no-spray buffers, provided they are sufficiently wide to reduce pesticide loading during aerial spraying; OR
- *Voluntary* – **By July 1, 2016, 1)** expand existing guidelines to create and maintain voluntary buffers for the aerial application of herbicides on non-fish-bearing streams and educate and train applicators on the new guidance; 2) monitor and track that voluntary guidelines are followed; 3) identify ODF and DEQ general authorities for enforcing changes when voluntary measures are not implemented; 4) revise the ODF Notification of Operation form to include a check box for aerial applicators to indicate that they must adhere to FIFRA labels especially for herbicides that are prohibited from use in/above waterbodies, for all stream types, including non-fish-bearing streams; and 5) track and evaluate the implementation of voluntary measures for the aerial application of herbicides along non-fish bearing streams to assess the effectiveness of these practices.

**Ex. 5 - Deliberative**

**Comment [AC32]:** This statement is not consistent with the decision doc.

**Ex. 5 - Deliberative**

**Comment [HA34]:** We need to discuss this a little. There is very good reason for suggesting an additional check box and very good reason for assuring FIFRA is followed. Let's talk tomorrow.

**Comment [AC35]:** I think we really need to provide an example of how we'd like to see it expanded now.

**Comment [AC36]:** The decision doc also includes this.

*For all voluntary programs, the state must meet all elements needed for voluntary program (see General CZARA Guidelines for Approval above or NOAA and EPA's 2001 memo on Enforceable Policies and Mechanisms for State Coastal Nonpoint Source Programs (<http://coast.noaa.gov/czm/pollutioncontrol/media/epmmemo.pdf>)).*

**Page 2: [1] Comment [HA7]**

**Henning, Alan**

**2/10/2015 4:38:00 PM**

I am not sure why July 2016 is the timeline for adopting a riparian rule change for medium and small fish bearing streams. The State's anticipated timeline, for adopting riparian rule changes that are currently being considered, is July 2015. We could identify the State's anticipated timeline — July 2015 - (for adoption of riparian rule changes) as a "milestone" for establishing additional CZARA management measures. If adequate changes are adopted by the Board of Forestry to provide for greater riparian protections for the medium and small fish stream milestone, we would have an example of the State's progress in meeting the additional management measures.

**Page 2: [2] Comment [WS8]**

**Will.Stelle**

**2/6/2015 3:21:00 PM**

## **Ex. 5 - Deliberative**

**Page 2: [3] Comment [AC10]**

**Allison Castellan**

**2/6/2015 3:21:00 PM**

## **Ex. 5 - Deliberative**

**Page 2: [4] Comment [AC11]**

**Allison Castellan**

**2/6/2015 3:21:00 PM**

## **Ex. 5 - Deliberative**

**Page 2: [5] Comment [AC13]**

**Allison Castellan**

**2/6/2015 3:21:00 PM**

Listing these as "examples" of state actions needed was not appropriate as these are MUSTS, not optional, if a state pursues a voluntary approach. Therefore, I have reframed as noted.

**Page 2: [6] Comment [d15]**

**dpeders**

**2/6/2015 3:21:00 PM**

How is compliance determined? Is it buffers of a certain distance everywhere all the time or an approach that achieves the outcome of cold water and habitat?

**Page 2: [7] Comment [PC17]**

**Psyk, Christine**

**2/6/2015 3:21:00 PM**

Compliance will depend on what sort of guidelines or requirements the State establishes and what level of flexibility it builds into those guidelines for site specific reasons. What we expect here is for the state to provide a description of the elements of the voluntary program they will adopt if they choose to go the voluntary program route.